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Online ‘chat’ facilities as pedagogic tools

A case study

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ABSTRACT This article assesses the pedagogic value of the ‘chat’ facility in the Blackboard integrated learning platform. It draws on a case study carried out by the author in the 2001–2 academic session. A level three class in research methods involved students in group working away from class and student feedback indicated that more support was needed to coordinate this independent work, without compromising its independent character. The ‘chat’ facility seemed to hold out the possibility of enhancing conventional, class-based techniques for generating informal discussion between students and, more particularly, for the co-ordination of their activities between classes. The lecturer perceived the integration of the facility into delivery of the unit as highly problematic, however. The reasons for this are discussed and a number of explanations are considered. Possible solutions are put forward.

KEYWORDS: *chat-rooms, learning technology, reflective methodology*

Introduction

This article offers a critical assessment of the ‘chat’ component of Blackboard, a generic intranet facility or platform, developed by Q Associates (<http://www.qassociates.co.uk>). The facility provides an on-screen window wherein users can exchange short text messages with other users. This version of computer-mediated communication is familiar from other settings; it is most often used as a facility on websites whose users are united by a shared common purpose, such as finding love, or losing weight. To assess its utility as a teaching aid I decided to integrate it into the delivery of a final year class in sociological research methods in semester one of the 2001–2 academic year. This report is based on that experience and my efforts to reflect upon it.

According to Hora and Kling (1999) not enough qualitative, student-centred work has been done to assess and explore the ramifications of

computer-mediated teaching and learning strategies. This report is intended, in a small way, to fill this gap. The approach taken here resembles theirs in that it incorporates the author's commitment to situated learning. By this is meant that the success or failure of a specific teaching tactic or delivery mode must be measured relative to a cluster of variables that have been identified as relevant to the experience of teaching and learning (Lyman, 1999). I begin, therefore, with a definition of the situation that preceded my attempt to introduce Blackboard, in terms of the characteristics of the students, their learning goals, and the learning strategies that had proved to be successful the previous year. In this definition of the problem-situation, I include a description of the chat facility itself and some preliminary remarks on the character of the medium I was trying to introduce.

The next section describes a class that was conducted using the 'chat' facility and some of the problems I perceived with it. The behaviour of class participants is markedly different from normal, 'real world' class behaviour. This is both positive, in that most students showed an increased willingness to 'speak', for instance, and negative, since a salient proportion of the verbiage produced in the 'virtual' class was off the point and unrelated to the tutor-determined learning outcomes of the session. However, thorough investigation of the data reveals that this was somewhat of a misperception on the part of the lecturer. This turns out to be the most interesting aspect of the study.

In the third and final section, I draw on these reflections and some of the literature on 'text-worlds' to speculate on alternative strategies for implementing 'chat'. My main argument is that features of the virtual classroom (VC) give rise to negative reactions on the part of tutors, while these mesh with the socially and culturally conditioned attitudes of students to produce an unduly negative view of the potential of the new medium. In explaining this I hope also to generate insights into how this outcome might be avoided in future.

Teaching and learning 'research methods'

The rationale for using Blackboard to support delivery of my final year class in research methods was clear. Students on the unit acquire generic research skills, and they do so primarily through hands-on experience. The unit is a year long and in the first semester they work in groups to design a research project, which they carry out in semester two. An important issue in the delivery of the unit is the maintenance of a balance between independent study/practice and more formal teaching that is carried out in the form of a two-hour long seminar once a week. The first time I taught the

module, student feedback expressed dissatisfaction arising out of a perceived lack of direction and of having to find their own way through the work without sufficient lecturer input. The teaching log from the previous year showed that this problem had been successfully overcome, largely by instituting discussion of each group's progress at the beginning of each class. Starting the class in this way affected the character of everything that followed, so that my talks on specific research methods benefited from regular interruptions and assertive questioning by students. Student performance in the first assessed exercise for the unit showed a marked improvement, with evidence that students perceived more connections between their research projects and the discussions we were having in class. However, a new problem emerged, as it became apparent that the internal cohesion of each group had been undermined. More groups reported that some individuals were working on their own rather than sharing their ideas with the group away from class. While the changes made the previous year seem to corroborate the idea that active engagement and discussion improve learning, concentrating this experience in the classroom seemed to have a negative impact on students' capacity to work well in their groups. Using the virtual classroom, then, held out the prospect of an alternative environment for discussion in which the interactions between students, student groups and lecturer might be altered. It would also alert students to the availability of alternative media of communication – networked computers – that they might use when working away from class.

Student characteristics

The students have been taught research methods in both their previous years of study. Significantly, parts of this teaching have been done using computers – they have worked in computer labs to acquire basic statistical skills in year one and have built on this with at least a few weeks in the labs in their second year. They have achieved basic competence in the use of methods before they arrive on the research methods unit. The majority of students on the research methods course are female (37/40, or 92.5%). They present with an imbalance between their actual knowledge and competence in this area and their degree of self-belief and confidence in relation to this. Since they are training to be active researchers, it is essential that they leave university with a much stronger sense of their real abilities than they have when they begin their final year of full-time undergraduate study. One of their key needs, therefore, is to develop confidence in their skills and abilities. An initial survey of this cohort's reasons for being in the class, however, revealed that student expectations of a methods course include the idea of relative passivity. Whereas on other units they expect to be challenged and to voice their own opinions, students perceive methods

units as ‘not so political’ and as ‘involving less of themselves’. This seems to go along with an expectation that the classes will be quite ‘directive’ and that they will be given workbooks containing exercises that have correct and incorrect answers. Careful listening to the lecturer will enable them to find the ‘correct’ answers. There is a tension, therefore, between student expectations and lecturer objectives for the unit.

Learning strategies

The learning strategy that had evolved on this unit was based on student participation and discussion. The classes were centred on a structured talk about a specific method, or an issue associated with social research, such as ethics. They were intended to clarify the nature of good social research while at the same time enabling students to draw on their own experiences to question the established knowledge, or received wisdom, on the strengths and weaknesses of a method, for example. Each class had the same structure, encouraging students to feel secure in that they knew what to expect each week. The first hour would begin with discussion of a research-based article that had been circulated to them the previous week. In this discussion, students would be encouraged to assess the research described in the article and to relate its strengths to the research they wanted to do themselves. After a 15-minute break, students worked in their groups. A research problem or question would be presented and they would be asked to come up with solutions or answers. For example, the week prior to the session conducted in the VC, the students were asked to develop a questionnaire that would enable them to assess how well a small group of researchers might be expected to work together. Each session concluded by directing students to the article that would form the basis of the next week’s discussion (the case study).

The medium

Blackboard is essentially a customizable website that enables lecturers to create designated spaces associated with specific taught units or modules. These spaces are then limited in terms of accessibility to those students who are registered for the units. Within the space, the lecturer can opt to include the following features:

- *Discussion boards:* These are modelled on internet ‘bulletin boards’. Anyone with access to the unit site may contribute to, or open up a discussion ‘thread’ by writing a short message and ‘posting’ it to the board. Subsequent visitors to the site see a list of titles and can choose to read messages and to post replies. Small groups of students can be assigned their own discussion boards.

- *Drop-off points*: Under such headings as 'Course Materials' and 'Course Information', lecturers can choose to place documents, hyper-text links and even interactive quizzes for their student users.
- *News and announcements*: Lecturers can determine which point in the Blackboard site is encountered first by students. If they choose to use the site attached to a given unit as a vehicle for announcements associated with the week-by-week running of a unit, then there is a page set aside for this purpose. This 'announcements' page is an obvious location for 'welcome' messages.
- *Communication*: This includes an email facility, whereby anyone on a unit can send a message to the university email address of any other participant. If students are assigned to groups (see below) then it is also possible to send a message to all the members of a given group. Under the communications heading we can also locate 'chat' (for an anatomical breakdown of the VC in principle, see French et al., 1999).
- *Groups*: Lecturers may organize students into groups and make a range of the above facilities available on an exclusive basis to the members of each group, in addition to the collective provision available to all persons taking the unit.

Navigability is ensured by the fact that in the use of all of these facilities a series of control buttons, situated down one side of the screen, remains constant. A limited amount of time spent experimenting with this would familiarize anyone with the most salient parts of a given site. The colour of the buttons and the overall appearance of the site can be customized by the lecturer, within fairly broad constraints.

The virtual class: A case study

In order to help integrate Blackboard into the delivery of the unit, it was decided to schedule one of the two hour classes in the VC, in week 3 of semester one.

Goals and structure of the session

The session had to have a structure that was consistent with the other classes, in order to minimize students' sense of discontinuity and of 'being used' in an experiment. Normally, each week would begin with discussion of the previous week's exercise, followed by a review of the case study. As stated above, the week prior to the Blackboard session, students had worked on producing a questionnaire that might be put to the members of another group. The lecturer had placed one of these questionnaires on each group's discussion board, along with instructions on how to use the email facility

to reply to the group that had produced that questionnaire. Thus, each group had its questionnaire administered to one other group and all the members of each group had the task of completing a questionnaire and returning their replies to the group that prepared it. This was a straightforward task, although it did require them to follow two sentences of written instructions.

In keeping with the policy of issuing a case study each week, students had been asked at the end of the previous week's class to visit and explore a website relating to the movie, *The Matrix*, before coming to the VC. The address for this website was issued to everyone and a link to the site was available from Blackboard. A handout explaining how to access Blackboard had already been provided by a colleague who was also using the facility and I knew from her that the students had used it before and so should have no trouble locating the relevant part of the site to participate in the virtual class. In keeping with the format for the 'real' classes, the students were to meet with me in the main VC and discuss the case study (in this case the *Matrix* website). We were then to break into groups to analyse the questionnaire data returned by other groups.

The Matrix website

The website is maintained by *The Philosopher's Magazine* and it uses the film to promote the idea of radical doubt, as first articulated by René Descartes, and to invite visitors to speculate on their own way around the 'dream argument'. Roughly stated, this argument raises the possibility that all of our sensory experience may be illusory, or a dream. This situation, known as radical doubt is dramatized through the central storyline of the film in which we follow a character who discovers that our world, the world of developed societies in 1999, is an illusion produced in his and, by implication, our minds by a huge computer. The website uses a similar scenario to introduce the idea of radical doubt. It invites us to consider the idea that our world may be an illusion, produced by a computer system. To lend plausibility to this, it invites visitors to answer a series of trick questions, including one about playing cards. This question is particularly significant as it uses an old card-trick to create the impression that the computer knows what the user is thinking in advance of their disclosing it. The effect is somewhat eerie, similar to that produced by watching *The Matrix* for the first time.

As stated, each of the case studies used in the delivery of the course concerns a specific aspect of the research process, including attention to the underlying methodological principles that guide sociological enquiry. My aim in introducing students to the *Matrix* website was to lead them into some reflection on the standpoint of the ethnographer, who is supposed to approach novel social environments with an open mind as to the

significance of the actions and events observed there. I saw this as an exercise that would be consistent with the aim of conducting a VC, for fairly obvious reasons. My hope was that the exercise would promote reflection on the ultimate character of social reality, on epistemological issues that underscore social enquiry, and on the nature of the 'chat' experience itself.

Research methods

I participated in the experiment as the tutor in the VC. This enabled me to gain a sense of what was going on and to apply the same reflective principles to VC experience as I would to my success or failure with respect to achieving learning outcomes in a conventional class session. In addition, however, I found that conducting the session in Blackboard provided me with tools for reflection in the form of an archive transcript of the session in the VC. Second, the standard unit review questionnaire was modified to include space for comments on this session and on the Blackboard facility in general. Third, I reviewed the session at the start of the following week's classes, through informal discussion. Finally, a discussion board 'thread' was initiated on the topic of how useful students found Blackboard in general. The investigation was a case study in Flyvbjerg's (2001) sense of a detailed exploration of a specific context, with emphasis on researcher reflexivity as both an important part of the process being described and a research tool.

Evaluating the virtual class

The VC session should be assessed for its utility in relation to the learning outcomes identified above for the class and the unit as a whole. The teaching log for the session shows a large degree of dissatisfaction on my part. In particular, there is a strong sense there that students have not behaved in a way that was appropriate or that I expected of them. For example, while the class was supposed to have started at 9:00am, I was still waiting for students to arrive in the VC at 9.23am. When students did begin to arrive, their interaction was primarily with each other and seemed simply to ignore my attempts to engage them. Indeed, in my diary for this session I find the following sentiment:

9.43am: Attempt to impose some kind of order in dialogue with X and Y (students) seems to lead to their immediate exit.

The archive

Examination of the archive for the session shows that, indeed, there is a certain amount of extraneous and apparently completely undisciplined exchange:

GK: The questionnaires: have you all done them and e-mailed them to the groups that wrote them?

Z: Hello

X: Anyone fancy a pint?

GK: X – please – this is a classroom

Z: What questionnaires?

Y: I'll get ma coat

GK: The questionnaires that are on your group discussion boards

X has left

Y has left

Z has left

Conversations like this, involving a succession of students asking what they were supposed to do, characterized the first part of both sessions in the VC. Different groups of students, not always members of the same research group, would drift in and participate in similarly disjoint conversations and then disappear again. Occasionally, they would return, to be redirected to the Matrix website. Finding myself having the same conversation over and over, I resorted to writing the schedule for the class on the virtual whiteboard within the VC. This did not prevent the following exchange, however:

GK: Have you all completed your questionnaires?

P: Yeah!

Q: Are you going to ask any more times!!!!

GK: Laughs

P: Ha ha ha

GK: Sorry – I forget who I've asked. Probably something to do with not being able to see anyone

R: I think we are all enjoying this!!!!

GK: Good

P: I know its weird

S: Morning everyone! I don't understand how you get the other questionnaires, I could only do group B Am I being stupid? she did get picked and she's gone to the Yorkshire dales.

At this point, the students resume a previous discussion, concerning the fate of a mutual friend, also a class member, who has been on the TV program, 'Blind Date'. This culminates in the following:

GK: Do you think you could defer discussion of your friend's dating activities for a few minutes, please?

P: When is she going?

GK: groans

Q: She was on TV, though.

GK: yawns

R: It's dead exciting

GK: falls asleep

P: Aw, sorry Graeme!

Q: You have our attention

S: The Matrix then. that card thing was cheating. . .

Although this was my reaction to the session at the time, however, a quantitative analysis of the interaction as recorded in the Blackboard archive does not justify my feeling of frustration at student behaviour. Rather, interaction in the VC seems to fall into four categories:

- 'Working': In these portions of dialogue there is discussion of class content in an overt and obvious sense.
- 'Self-consciousness': Portions of dialogue are directly concerned with the technical aspects of the situation. For example, students ask how to do something, or the lecturer is involved in repeating explanations, usually concerning the use of Blackboard itself.
- 'Setting up': This is the kind of greeting and welcoming that goes on in a normal classroom, where a teacher attempts to put students at their ease and ensure that they are comfortable in the learning situation.
- 'Irrelevance': These are genuinely off-the-point exchanges, normally between students, such as the conversation about Blind Date above.

If we break portions of the archive down into segments according to their membership of one of these categories, we find the following, surprising set of statistics:

- Working: 45% (1362 lines)
- Self-consciousness: 27% (834 lines)
- Setting up: 25% (762 lines)
- Irrelevance: 3% (102 lines)

This suggests that there is a discrepancy between the lecturer's perception of the session and the actual accomplishments, highlighted by the

archive. A sample of real work is the following, which, as the figures suggest, is more representative of what actually occurred in the VC:

GK: The question is, how do you know what is real and what is not?

P: u don't

Q: you don't

R: We don't know

S: You don't, you just live with it. There is nothing to prove either way what is real and what is not to you don't know

GK: The reason for looking at the Matrix was to get at the issue of what counts as reality. If we say that reality is what works – and not something deep and mysterious – then, presumably, it is socially constructed?

P: Maybe more socially maintained than constructed

Q: Good point

R: so, reality is socially constructed?

Q: What if we just make all these diversions up like whether it's real or not cos we can't handle that this is all there is to life?

R: That is what I thought 2.

And later:

GK: now we're all on the right track anyway. I am trying to subvert common sense: reality may not be what we take it to be. Why is that a useful starting point for us as social researchers?

P: I'm confused

Q: because what we find out about so called reality may not be true anyway

GK: Please say more, P

Z: reality is what u make of it surely

Y: Aim to be open-minded and not influence the research by our own views and experiences

X: its the idea that we r all searching 4 hidden truths and meanings when there may not be any

This exchange suggests that a key aim of the session has been realized. At least some of the students are seeing the connection between their experience on the Matrix website, the notion of radical doubt and a presuppositionless mode of social enquiry. Moreover, nearly all students 'spoke' in the VC, just as they do in the real one, suggesting that confidence was growing too – another objective of the session. This finding comports with

those of Williams (2002), who reports that 46 percent of material posted by students to discussion boards in the early stages of implementation – the first few weeks – of a similar facility to Blackboard was, in his word, 'nonsense'. The nonsense quota diminished with time, however, indicating that students indulged in this as a way of getting started with the new medium.

Student views

Student feedback on the session showed that they had a more realistic appraisal of its strengths and weaknesses than was found in the teaching log. The discussion at the beginning of the following week's classes revealed the following:

- Universal assent to the idea, expressed by one student, that Blackboard was easy to use.
- A similarly universal feeling that the VC was not useful, though it was enjoyable (comparable findings are reported by Schutte, 2000 and Hiltz, 2000).
- Disagreement over whether the VC was intrinsically trivializing.
- Interest in the 'coercive' role of lecturers in 'real' classrooms – this arose as a topic in both sessions.

This more ambivalent reaction to the VC is more consistent with the actual nature of the experience than my own initial assessment. That students said they enjoyed using the VC suggests that they were probably learning something during the experience. They were, after all, mastering a new programme, discussing, with varying degrees of success, their questionnaires, and in many cases engaging with the Matrix website. Moreover, their assessment that the experience was not useful should be understood in light of the comments above concerning student expectations. Students often believe that if they are having fun then they are not really working. This is, as we know, completely wrong as the two are far from mutually inconsistent (Ramsden, 1998). Given the previous comments about confidence among students on the unit and their tendency to seek out a more humbling and submissive experience to call 'learning', it seems likely that the VC was more useful to them than they or I realized at the time. This finding corroborates that of Aberson et al. (2000), who found that similar levels of teaching success are possible with divergent delivery media.

Perhaps the most interesting aspect of these discussions, in light of the archive data above, is the fact that students felt that lecturers were more coercive in traditional classrooms. This surprised me, as my quite sharp comment, made in an attempt to terminate the Blind Date discussion, struck me at the time as unusually severe. However, it was not particularly

effective – as the transcript shows. It seems that the students enjoyed the liberation that not being physically present allowed them. The normal sanction of public embarrassment was largely lifted by the relative anonymity of the VC. In these circumstances, playful banter and chit chat, which are always present in the murmuring noise that we are aware of in a class(!) are sanitized and included as on an equal level with the ‘official’ discourse of the classroom. The students experienced this as subversive and enjoyed it. At the time I felt undermined by it, but I now view matters differently.

Students were also asked for their feedback on the VC some weeks afterwards, through the medium of the revised unit review questionnaire. They were aware that I had been hoping they might use it again and I had told them that I would be available to them in the VC at regular times each week. None of them had done this. Moreover, none of them had contributed to my discussion string on the usefulness of Blackboard. Their responses, therefore, tended to take the form of apologies. They contained, however, some interesting insights into how students perceived Blackboard in general and the VC in particular. Responses tended to fall into six categories:

1. Asserted that time was the issue and that they would have used the VC if formal class time had been given over to it (9/22.5%): ‘Not enough time in college to go on to Bb.’; ‘Not enough time to play around with Blackboard’ (note the reference to ‘play’); ‘Not enough time to go on, too much to do for other modules’.
2. Described Blackboard as a mode of giving feedback, suggesting that they saw it as a direct channel to the lecturer, rather than as a resource for themselves (4/10%): ‘I did not use Blackboard to “feedback” because I used other ways, like class discussion’; ‘I would rather speak to the tutor face to face’.
3. Saw enough of their peers in reality, especially the people in their research group, so had no need of the site for their research (8/20%): ‘I see the people relevant to me every day anyway’; ‘I see everyone in my group quite often so I did not see the need’.
4. Believed that others were not using it and so saw no point in doing so themselves (12/30%): ‘No one else uses it so I don’t see the point’; ‘Nobody else seems to use it so I don’t really see the point in going on myself’; ‘As not many people use it, I don’t often log on’.
5. Intimidated by technology (6/15%): ‘I’m not a computer person’; ‘I am still not completely comfortable with computer technology (Luddite)’.
6. Forgotten it existed (1/2.5%): ‘To be honest I had forgotten about Blackboard’.

Conclusions

In concluding this article I will interpret the data in terms of what they tell us about the utility of the 'chat' facility as a Blackboard component, how it compares with other teaching environments, and raise some questions about how it might be used more effectively in light of the findings presented here. The interesting anomaly uncovered here concerns the lecturer's perception that too much 'nonsense' was being spoken by students in the VC, whereas in fact the nonsense quota is probably about the same as in 'real' classroom situations. The factors that produce this false perception seem to be threefold:

1. Student babble becomes more salient in this medium, because all text is the same. Whereas in the 'real' classroom situation it is possible, indeed probably second nature, to screen out the hubbub generated by students, this is not so easy when the hubbub bubbles forth onto the screen. This can be a disconcerting experience, but it is likely that some such nonsense always plays a role in classes, as people put themselves and each other at ease. It is also worth pointing out that casual conversation in class can provide a break from learning, potentially improving students' concentration at other times.
2. Students talk nonsense with greater confidence than usual. This seems to be a function of the novel environment of the VC, in which the physical proximity and mutual visibility of the classroom situation are overturned. Students may have been familiar with such environments from other, more flippant contexts, and have internalized an association between chat-rooms and a trivializing attitude. In his discussion of this issue, Feenberg draws on Goffman's distinction between an internal, sacred self and the self one consciously presents to others in everyday interactions. In the VC, he suggests:

By increasing the individuals' control of image, while diminishing the risk of embarrassment, computer talk alters the sociological ratio of the two dimensions of selfhood and opens up a new social space. (Feenberg 1989: 25)

This increased willingness to talk nonsense is, of course, an opportunity for teachers in HE, not because we place a special premium on gibberish but because it can be the start of a more productive interaction. It is important, however, that teachers expect such behaviour in the initial phase of student use.

3. The standard cues and 'proximity' expressions (Boden and Molotch, 1994) are not available to the lecturer, with the result that authority has to be invoked sooner. This is disagreeable to the lecturer, who perceives himself as a democratic personality and a member of a 'learning

community' with the students, rather than as an authority figure. It creates a discrepancy between the basis of one's professional self-esteem and one's perception of one's own practice. This is disconcerting and informs a negative assessment of the new medium.

Student feedback shows that, overwhelmingly, students did not use the VC because they did not believe that others were doing so. This could be addressed by promoting the facility as both regularly used and containing assessed exercises. Their perception of the facility as, in some sense, 'fun' seems to have inhibited them also, as they did not see it as sufficiently taxing to count as 'proper work'. This, alongside the perception of many that Blackboard was essentially a 'feedback' mechanism, highlights the problem discussed at the outset of a 'culture of deference' among Northumbria students, which may be related to their class backgrounds. In any case, the way to address this does not rest in debunking Blackboard or the VC, which have performed as well as would any other delivery mechanism under these circumstances. Rather, we should aim to exploit gains in student confidence by using the technology to empower them further. I submit that this may best be achieved by giving them more control over the Blackboard environment itself. If this could be done in a way that was challenging, without being overbearing, then it would also address the students' sense that work in the VC was too playful to be real learning.

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